

INCLINED FREE WATER KNOCKOUT (IFWKO)

ABSTRACT

5 A free water knockout designed for removing large amounts of water that is not entrained
in the oil is disclosed. The vessel is supported so that the axis is oblique through the
horizontal, thus defining an upper and a lower end, each of which is closed by a head
10 which may be hemispherical in shape. An elongated sleeve extends coaxially through the
vessel to increase the surface area of the vessel relative to the volume of the vessel.
15 Incoming fluids are spun tangentially to the wall of the elongated sleeve to help promote
the separation of oil droplets from the water. A burner system is provided to add heat to
the oil after the free water is removed from the production fluids.
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